

## CLAIMS

### **I claim:**

1. A trailer tongue extension assembly comprising:  
a tubular trailer tongue having a removable extension;  
5 a first electrical connector disposed within the trailer tongue; and  
a second electrical connector disposed within the removable extension;  
wherein the first and second electrical connectors engage and disengage as the removable  
extension is installed or removed from the trailer tongue.
2. The trailer tongue extension of assembly of claim 1, wherein the first electrical  
10 connector is disposed in a holder that is removably disposed within the trailer tongue.
3. The tongue extension assembly of claim 1, wherein the second electrical  
connector is disposed in a holder that is removably disposed within the removable extension.
4. The trailer tongue extension assembly of claim 0, wherein the first electrical  
connector and the second electrical connector are substantially enclosed within the assembly.
- 15 5. The trailer tongue extension assembly of claim 0, wherein the extension slip-fits  
into the tubular trailer tongue.
6. The trailer tongue extension assembly of claim 2, wherein the extension slip-fits  
into the holder.
7. The trailer tongue extension assembly of claim 0, further including an attacher  
20 configured to attach the removable extension to the trailer tongue.
8. The trailer tongue extension assembly of claim 1, wherein the first electrical  
connector and the second electrical connector are mated electrical plugs.

9. The trailer tongue extension assembly of claim 1, wherein the first electrical connector is keyed to mate only with the second electrical connector of the extension.

10. The trailer tongue extension assembly of claim 1, wherein the first electrical connector is inaccessible from an open end of the trailer tongue without the trailer tongue extension.

11. The trailer tongue extension assembly of claim 1, further including a trailer electrical harness connected to the first electrical connector and a towing vehicle electrical harness connected to the second electrical connector.

12. The trailer tongue extension assembly of claim 11, wherein when assembled, the vehicle electrical harness provides electricity to the trailer electrical harness.

13. The trailer tongue extension assembly of claim 1, further including a lock structured and arranged to lock a tongue pin in place as it is passed through aligned holes of the trailer tongue and removable extension.

14. The trailer tongue extension assembly of claim 1, wherein the tubular trailer tongue and removable extension are cylindrical.

15. The trailer tongue extension assembly of claim 1, wherein the tubular trailer tongue and removable extension have a substantially rectangular cross section.

16. The trailer tongue extension assembly of claim 1, wherein the tubular trailer tongue and removable extension have a substantially square cross section.

17. A trailer tongue extension assembly comprising:  
a tubular trailer tongue having at least one open end and an internal channel at least partially along a longitudinal axis from the open end;

a first electrical connector disposed within the internal channel;  
a tubular tongue extension having a mating end structured and arranged to slip fit into the  
open end of the trailer tongue, and  
a second electrical connector disposed at least partially within the mating end and  
5 structured and arranged to mate with the first electrical connector; and  
an attacher configured to attach the tongue extension to the trailer tongue when the  
tongue extension is slip-fit into the trailer tongue.

18. The trailer tongue extension assembly of claim 17, wherein the first electrical  
connector and the second electrical connector are mated electrical plugs.

10 19. The trailer tongue extension assembly of claim 17, wherein the electrical  
connectors are enclosed within the tongue extension assembly when assembled.

20. The trailer tongue extension assembly of claim 17, wherein the first electrical  
connector is keyed to mate only with the second electrical connector of the tubular tongue  
extension.

15 21. The trailer tongue extension assembly of claim 17, wherein the first electrical  
connector is inaccessible from the open end without the trailer tongue extension.

22. The trailer tongue extension assembly of claim 17, wherein engaging the attacher  
when the tongue extension is removed from the open end of the trailer tongue prevents mating  
between the first and second electrical connectors.

20 23. The trailer tongue extension assembly of claim 17, wherein the attacher ensures  
the first electrical connector and the second electrical connector remain mated when the tongue  
extension is slip-fit into the opening of the trailer tongue.

24. The trailer tongue extension assembly of claim 17, further including a trailer electrical harness connected to the first electrical connector and a towing vehicle electrical harness connected to the second electrical connector.

25. The trailer tongue extension assembly of claim 24, wherein when assembled, the vehicle electrical harness provides electricity to the trailer electrical harness.

26. The trailer tongue extension assembly of claim 17, wherein the attacher is a tongue pin passing through an aligned set of holes in the trailer tongue and the trailer extension.

27. The trailer tongue extension assembly of claim 17, further including a lock structured and arranged to lock the tongue pin in place as it is passed through the aligned holes of the trailer tongue.

28. The trailer tongue extension assembly of claim 17, wherein the tubular trailer tongue and tubular trailer extension are cylindrical.

29. The trailer tongue extension assembly of claim 17, wherein the tubular trailer tongue and tubular trailer extension have a substantially rectangular cross section.

30. The trailer tongue extension of assembly of claim 17, wherein the first electrical connector is disposed in a holder that is slip-fit into the internal channel of the trailer tongue.

31. The tongue extension assembly of claim 17, wherein the second electrical connector is disposed in a holder that is slip-fit into an opening in the mating end of the removable extension.